

## CLAIM AMENDMENTS

1. (previously presented) A microscope slide composition comprising:
  - a) a substrate with a surface comprising discrete sites, said sites separated by a distance of less than 50  $\mu\text{m}$ ; wherein said substrate comprises the dimensions of a microscope slide; and
  - b) a population of microspheres comprising at least a first and a second subpopulation, wherein said first subpopulation comprises a first bioactive agent and said second subpopulation comprises a second bioactive agent, wherein said microspheres are randomly distributed on said surface.
2. (previously presented) A composition according to claim 1, wherein said sites are separated by a distance of less than 25  $\mu\text{m}$ .
3. (previously presented) A composition according to claim 1, wherein said sites are separated by a distance of less than 15  $\mu\text{m}$ .
4. (previously presented) A composition according to claim 1, 2 or 3, wherein said sites are separated by a distance of at least about 5  $\mu\text{m}$ .
6. (previously presented) The composition according to claim 1, wherein the distance between centers of a first and second microsphere of said first subpopulation is at least 5  $\mu\text{m}$ .
7. (previously presented) The composition according to claim 6, wherein the distance between said first and second microsphere of said first subpopulation is less than about 100  $\mu\text{m}$ .
8. (previously presented) A composition according to claim 1, wherein said substrate further comprises first and second assay locations, wherein said first and second subpopulations are distributed in said first and second assay locations.
9. (previously presented) A composition according to claim 8, wherein the distance between a first and second microsphere of said first subpopulation is less than about 100  $\mu\text{m}$ .
10. (previously presented) A composition according to claim 9, wherein the distance between a first and second microsphere of said first subpopulation is less than about 50  $\mu\text{m}$ .

11. (previously presented) A composition according to claim 9, wherein the distance between a first and second microsphere of said first subpopulation is less than about 15  $\mu\text{m}$ .
12. (previously presented) A composition according to claim 9, 10 or 11, wherein the distance between said first and second microsphere of said first subpopulation is at least about 5  $\mu\text{m}$ .
18. (previously presented) A method for making a microscope slide composition comprising:
  - a) providing a substrate with a surface comprising discrete sites, said sites separated by a distance of less than 50  $\mu\text{m}$ , wherein said substrate comprises the dimensions of a microscope slide; and
  - b) randomly distributing population of microspheres comprising at least a first and a second subpopulation, wherein said first subpopulation comprises a first bioactive agent and said second subpopulation comprises a second bioactive agent.
19. (previously presented) The method according to claim 26, wherein said wells are separated by a distance of less than 25  $\mu\text{m}$ .
20. (previously presented) The method according to claim 26, wherein said wells are separated by a distance of less than 15  $\mu\text{m}$ .
21. (previously presented) The method according to claim 18, wherein the ratio of said first and said second subpopulation is at least 1: 36.
22. (previously presented) The method according to claim 18, wherein the ratio of said first and said second subpopulation is at least 1: 100.
23. (previously presented) The method according to claim 18, wherein the distance between the centers of a first and second microsphere of said first subpopulation is at least 5  $\mu\text{m}$ .
24. (previously presented) The method according to claim 18, wherein the distance between the centers of a first and second microsphere of said first subpopulation is at least 15  $\mu\text{m}$ .
25. (previously presented) The method according to claim 18, wherein the distance between a first and second microsphere of said first subpopulation is at least 50  $\mu\text{m}$ .

26. (previously presented) The method according to claim 18, wherein said discrete sites are wells.